REMARKS/ARGUMENTS

Claims 1-25 are active in the case.

The Examiner and SPE Kelly are thanked for the courteous interview conducted on August 4, 2003 in which it was agreed that the present claims distinguish over the references and will be allowed.

Claim 3 has been amended to delete the phrase "claim 1 or" so that Claim 3 is dependent on Claim 2 and Claim 9, which was objected to in the Official Action is now dependent on Claim 1. Claims 12 and 13 have been amended to insert the term "comprises" for the term "is" and to add proper Markush language. Claims 18 and 20 have been amended to add proper Markush language. No new matter has been added into the amended claims.

It is noted that the Information Disclosure Statement filed January 9, 2002 has not been considered. It is requested that the Examiner consider the references, initial the Form PTO-1449 in the appropriate places, sign and date the Form PTO-1449 and return a copy to Applicants with the next Official Action.

It is noted that the foreign priority request has only been partially acknowledged by the Examiner, since none of boxes 1, 2 or 3 has been checked. It is requested that the Examiner acknowledge the claim to foreign priority and send notice of acknowledgement to Applicants with the next Official Action.

The rejection of Claims 1, 3, 5-10, 12-14 and 21-25 under 35 U.S.C. § 102(b) as anticipated by Nunomura et al. is traversed.

The substrate in Nunomura et al. is described only as a ceramic material broadly in column 4, which may be a specific Perovskite compound and embodiments 1-4 of the reference describe the support as a ceramic material, which is a powder mixture of alumina and borosilicate glass or lead glass frits. There is no teaching or suggestion in Nunomura et

al. that the substrate meet the requirements of present Claim 1 of having a coefficient of thermal expansion of 10 to 20 ppm/K. The present specification on pages 1-4 sets out problems associated with the formation of dielectric layers of a ceramic type which may contain barium titanate formed on substrates in electroluminescent devices. Because of the difference in coefficient of thermal expansion between the substrate and the dielectric layer in prior art composite substrates, cracks in the dielectric layer may form when the dielectric layer slurry is fired to form the ceramic dielectric layer. This causes problems in the electroluminescent devices in emission luminance and luminous efficiency. The substrate of the present invention solves the above problem by having a very low coefficient of expansion, which prevents degradation of the dielectric layer and the consequent lowering of emission luminance and luminous efficiency in the electroluminescent device.

Further, comparative data set forth in Table 1 on pages 19-20 of the specification shows dielectric layers on substrates meeting the requirements of the present claims in Examples 1-9 which demonstrate superior results in relative permittivity, emission start voltage and emission luminance at 210 V, when compared to dielectric layers on substrate materials of the prior art. For instance, the emission start voltage for Examples 1-9 of the present invention range from 140 down to 95 V, while Comparative Examples 1 and 2 are 186 and 192 V, respectively, a significant increase in start voltage required. Emission luminance at 210 V ranges for Examples 1-9 of the present invention from 1000 to 1500 cd/m^2, while Comparative Examples 1 and 2 are 150 and 60 cd/m^2, respectively, a significant decrease in emission luminance. The claims are not anticipated by nor obvious over Nunomura et al.

The rejection of Claims 1, 2, 4 and 11 under 35 U.S.C. § 103(a) as unpatentable over Nunomura et al. in view of JP 06-084692 is traversed.

JP 06-084692 does not remedy the defects of Nunomura et al., because the magnesium oxide and manganese oxide referred to in the Japanese reference is used in the dielectric layer along with other constituents, like barium titanate and is not used in the substrate, which is clearly described only as ceramic material generally in paragraphs [0065] through [0075]. Therefore, for these reasons and the reasons set forth immediately preceding the claims distinguish over the combination of references.

The rejection of Claims 15, 16 and 20 under 35 U.S.C. § 103(a) as unpatentable over Nunomura et al. in view of Arai et al. is traversed. Arai et al. does not remedy the defects of Nunomura et al., since Arai et al. is cited only for the showing that the second electrode can be tin-doped indium oxide (ITO) with a particular proportion of tin oxide. Arai et al. does not teach or suggest the substrate of the present claims. The claims distinguish over the combination of references.

The rejection of Claims 17-19 under 35 U.S.C. § 103(a) as unpatentable over Nunomura et al. in view of Chung is traversed.

Chung does not remedy the defects of the Nunomura et al. reference, since Chung is cited only for the teaching that the second electrode can be amorphous or polycrystalline silicon that has been doped with material as per present Claims 17-19. Chung does not teach or suggest the substrate of the present claims. The claims distinguish over the combination of references.

The objection to Claim 9 under 37 C.F.R. § 1.75 as being a substantial duplicate of Claim 3 has been remedied by the amendment to Claim 3. Claims 3 and 9 are not duplicate claims.

It is submitted that Claims 1-25 are allowable and such action is respectfully requested.

Respectfully submitted,

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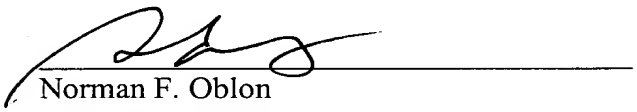

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